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症　　例

A Case of Anomalous Bile Duct Associatad with Cholelithiasis

by

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Recently we have experienced a case of cholelithiasis whose cystic duct empties to the right hepatic duct.

In order to avoid injury to the major bile ducts, we must always be aware of the possibility of encountering anatomic anomalies. And the detailed anatomy of the cystic-common duct junction should be visualized before any structure is divided. In the presence of acute or subacute inflammation, however, it is often quite difficult to delineate the exact anatomy.

Case Report

The patient, a 49 year old woman, was admitted to our hospital on May 15 of this year, with the chief complaints of recurrent abdomimnal pain and jaundice.

On physical examination, no pathological signs but jaundice were noticed. Serum bilirubin was 3.04 mg per cent and alkalin-phosphatase 22.8 K.A. units. Stones were demonstrated in the common bile duct by drip infusion cholangiography (Fig. 1).

On June 7, Laparotomy was performed through a right paramedian incision. The mesocolon and duodenum adhered extensively to the gallbladder and liver, and there was marked scarring in the hepatoduodenal ligamnnt. The gallbladder was tense and edematous and contained a stone. The common bile duct was dilated to the diameter of 1.6 cm and contained four stones. After removing the stones through a choledochotomy incision, transduodenal papilloplasty was done, because there was moderate resistance against bougie of 5 mm in diameter. Then retrograde (socalled "vom Cysticus aus") cholecystectomy was to be done, but a duct which appeared to be the cystic duct at first glance had a diameter of 1 cm, and the anatomy of the cystic-common duct junction wes quite obscured by scarring. Therefore at this point the retrograde dissection was abandoned, and operative cholangiography was performed through a Nelaton's catheter inserted to the gallbladder. As shown in Fig. 2, the duct first assumed to be the cystic duct proved to be the right hepatic duct and the cystic duct entered the right hepatic duct. The normograde (socalled

Fig. 1

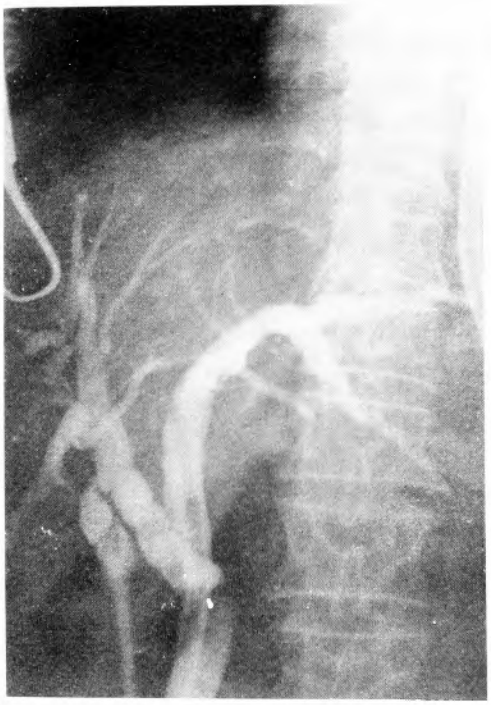

Fig .2

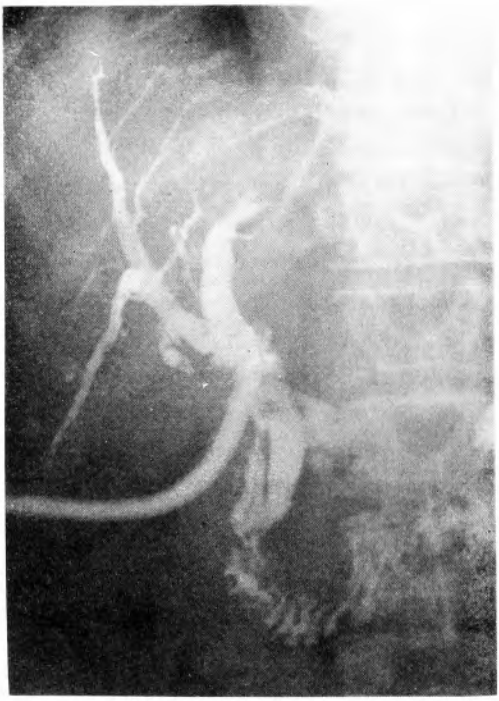

Fig. 3

"vom Fundus aus") cholecystectomy was done, but we could not help retaining the long cystic duct stump in order to avoid injuries to the right hepatic duct.

The postoperative course was uneventful. On the 20 th postoperative day T-tube cholangiogram (Fig. 3) showed free flow into the duodenum and no residual stones. The patient was discharged on July 7.

Discussion

As well known, the anatomic anomalies of the biliary tract and its vasculature are not infrequent findings in the biliary surgery (Fig. 4).[1]

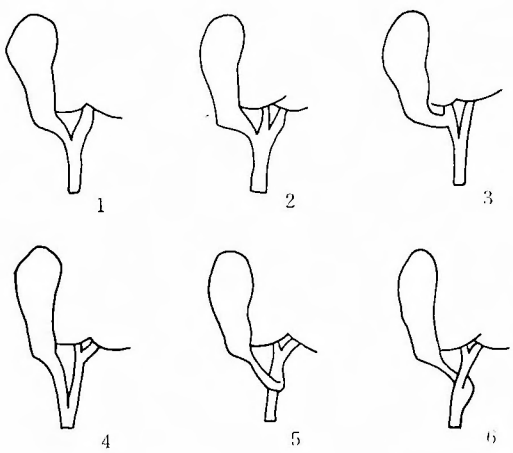

Fig. 4 Various anomalies of the bile ducts[1]

The cystic duct entering the right hepatic duct was noted in 1 of 100 dissections by Thompson[2] and in 3 of 500 dissections performed by Daseler et al.[3]

In an elective surgery of the gallbladder, we prefer to retrograde method ligating the cystic artery first, because the procedure is less bloody and more time-saving than the normograde method. In order to perform this procedure safely, however, the exact anatomy of the bile ducts should be obtained. Since the anatomy is often ocscured by edema, adhesion and scarring, in the presence of acute or subacute inflammation, the retrograde procedure should not be used to avoid injuries to the major bile ducts.

The sequelae of stricture of the common bile duct are, as well known, are very grave, and the most cases of the stricture are caused by surgical injuries as shown in Table.[4]

When, because of inflammation, there is any doubt as to exact anatomy of the bile ducts, we should at once resort to operative cholangiography. Its great value is proved by the present case.

Whether anomalies of the biliary tract predisposes to biliary tract disease is not known.

Table[4]

Causes of stricture in 123 patients

	No. of cases
Operative injury	99
Cholangitis	11
Fibrosis of ampulla	9
Adhesions	2
Trauma	1
Unknown	1

Summary

A case of cholelithiasis whose cystic duct entered the right hepatic duct was reported.

In order to perform cholecystectomy safely in the presence of anomalies and inflammation, high suspicion regarding the anomalies should always be born in mind, operative cholangiography should be promptly done, and the normograde procedure should be preferred to.

The authors wish to express their sincere gratitude to Prof. Dr. Yorinori Hikasa for his kind guidance.

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和 文 抄 録

胆嚢管が右肝管に開口せる胆石症の1例

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49才の女子。右上腹部痛と黄疸を主訴として入院。総胆管胆石症の診断のもとに手術を行なったところ，胆嚢管が右肝管に開口するという奇型を伴っていた。手術時の炎症性癒着が高度であったため，術中胆道造影を行なうことによって，はじめてこの奇型を確認し得た。胆道奇型についていささかの文献的考察を加えると共に胆道手術に当っては常に胆道奇型の存在を頭に入れておくことが必要であり，また解剖学的に疑問点があれば直ちに胆道造影を行なうこと，胆嚢剔出術は底部からする順行性がより安全であることをのべた。